

HARNESSING THE POWER OF MOBILE BROADBAND FOR DIGITAL LEARNING

The FCC is announcing the selection of 20 E-rate Learning On-the-Go wireless program applicants to help schools and libraries deliver Internet connectivity and digital learning over mobile wireless devices, like digital textbooks.

- **The National Broadband Plan presented a vision of cutting-edge learning inside and outside the classroom.** The FCC's E-rate program – established by Congress to bring connectivity to all schools and libraries across America – is an important tool to help realize this vision.
- **The FCC is helping to connect America's schools and libraries to the networks of the future.** Last year, the FCC launched the "Learning On-the-Go" wireless pilot program to explore how E-rate can help schools and libraries offer off-premises wireless access to the Internet. Today, the FCC is announcing the recipients of funding under the pilot program.

Digital and Mobile Learning

- **The FCC is empowering schools and libraries to bring mobile learning solutions to our nation's students and communities through the funding of off-premises wireless connectivity**
 - Using mobile wireless connectivity in school and at home, students can learn using personalized and interactive programs on learning devices, like digital text books, that are tailored to their skill set.
 - Digital textbooks allow parents and teachers to better monitor student progress and extend interactive learning into the community and after school hours – better than before when E-rate could only be used for on campus Internet connectivity.
 - Due to low cost and accessibility, mobile learning can advance digital equity, particularly for children from economically and socially disadvantaged communities.
- According to the 2010 E-rate survey, schools and libraries reported that:
 - 56% expect to **implement or expand digital textbook use** in the next few years
 - 45% expect to implement or **expand the use of wireless devices** for digital learning
- **Spectrum is a key input** into any wireless broadband delivery system. The FCC's comprehensive spectrum agenda – with the goal of **unleashing 500 MHz of spectrum for mobile broadband use and freeing unlicensed spectrum bands for uses such as Super Wi-Fi** – will help the private sector deliver fast and efficient solutions for wirelessly enabled digital learning.

Learning On-The-Go Wireless Pilot Program

- **The pilot program** will help the FCC learn how best to support wireless connectivity services for mobile learning devices, like digital text books, so that students and patrons can connect with online resources even when they're not in school or at a library.
- The FCC has selected **20 Learning On-the-Go applicants** to enable **schools and libraries to deliver Internet connectivity and digital learning** over mobile wireless devices outside of the school or library. We didn't dedicate all of the money set aside for this program (\$10 M). Rather we are allocating funding to 20 of 95 schools and libraries across the nation that applied for participation in the pilot program. In summary, the FCC's 20 projects selected to be part of the pilot include the following demographics:

- Funding of approximately \$9m for nearly 35,000 students across 14 states¹
- Wireless connectivity will be provided to 10 netbook/laptop programs, 2 virtual/online schools, 3 handheld-device programs, and 5 combined technology programs
- The pilot program was oversubscribed by 370%, demonstrating the strong demand for wireless connectivity by schools and libraries.
- To ensure that off-premise Internet access is compliant with the Children’s Internet Protection Act, the participants selected will utilize robust filtering measures.
- **The FCC will evaluate the effectiveness of the program** to determine whether and how off-premises wireless services should be eligible for continued E-rate support. Program evaluation will be based on a number of criteria – to be detailed in a forthcoming order formally selecting the pilot participants – including usage of educational and research resources by students and library patrons. Qualified pilot programs will be funded in the 2011-12 school year, assuming compliance with all other program requirements.
- According to the U.S. Department of Education, recent studies by the National Training and Simulation Association in Arlington, VA and others have shown that technology-based instruction can reduce the time students take to reach an objective by 30-80 percent.
- Globally, according to studies produced by companies such as NextUp.com, education is nearly a \$4 trillion industry and that number will grow rapidly as emerging economies in Asia, Africa, and South America increasingly look to provide high quality education to all their citizens. Education technology likely will play a critical role in the expansion of education in these countries – in much the same way that some developing countries skipped building a landline phone system and built cell networks. The FCC’s E-Rate program will continue to support schools and libraries across America working toward the goal of helping ensure that America’s students receive the best education and the high-tech skills to compete in the 21st Century economy.

Examples of Selected E-rate Learning On-the-Go Wireless Program Applicants

1. Sioux City Community School District (Sioux City, IA)
This netbook program will provide wireless connectivity for 10th through 12th grade students across three high schools through blended instruction in its learning management system. This allows the district to extend the time and place of the classroom to virtually anytime and anywhere when coupled with offsite wireless access.
2. Greater Southern Tier Boards of Cooperative Educational Services (BOCES) (Watkins Glen, NY)
GST BOCES is an Educational Service Agency that supports 21 component districts in five counties across the Southern Tier of New York State. Its Mobile Learning Device Project will provide middle and high school students with ubiquitous access to online learning devices (such as smartphones and netbooks) utilizing a virtual classroom software program.
3. City School District of New Rochelle (New Rochelle, NY)
This laptop program targets certain student groups (English language learners, economically disadvantaged students, lower-performing students, and students with disabilities) in 5th through 9th grade. A part of the curriculum’s objective is to enable students to access digital textbooks via wireless connectivity.

¹ Selected projects are located in the following states: AL, CA, CO, FL, GA, IA, NC, NM, NY, LA, OH, MI, PA, and TX.

4. San Diego Unified School District (San Diego, CA)

The District has established a Mobile Learning Program to seamlessly integrate ubiquitous, one-to-one computing and other 21st century technology into all teaching and learning throughout the curriculum. Its program will serve 6th grade in eight middle schools and school-wide in two middle schools.

5. Southern Tier Library System (Painted Post, NY)

The intent is to include handheld mobile devices, such as tablets, netbooks and smartphones as training platforms for its mobile JobLink project which provides online job searching, resume writing, job application skills, and digital literacy to unemployed and under employed individuals within a 3,500 square mile rural service area. The JobLink project would expand that training by providing wireless Internet access on handheld mobile devices.

FCC Education Agenda, beyond the Learning On-the-Go wireless program

Through modernization of the E-rate program, the FCC is helping to bring fast, affordable Internet access to schools and libraries across the country. These changes will help ensure that America's students receive the best education and the high-tech skills to compete in the 21st century economy. Beyond the wireless pilot program, the FCC's 2010 E-rate order is delivering:

- **Super-Fast Fiber:** The FCC's E-rate Order is helping to bring affordable, super-fast fiber connections to America's schools and libraries. It allows participants to use E-rate funds to connect to the Internet in the most cost-effective way possible, including via unused fiber lines already in place across the country and through existing state, regional and local networks. With these fiber networks, schools and libraries can provide students and communities with cutting-edge connectivity, while at the same time saving millions of dollars by bypassing more expensive options.
- **School Spots:** The FCC also opened the door to "School Spots" – where schools have the option to provide Internet access to the local community after students go home. With affordable fiber, these School Spots are a major step toward the National Broadband Plan's goal of connecting an anchor institution in every community to affordable 1 Gbps broadband. School Spots will help ensure that people who otherwise lack access can enjoy the benefits of super-fast broadband.